

REMARKS

As of the filing of the present reply, claims 1-30 were pending in the above-identified US Patent Application.² Currently, claims 1-20 and 24-30 are withdrawn due to an election requirement, claims 21 and 23 are rejected under 35 USC §102, and claim 22 is rejected under 35 USC §103.³

In the present reply, Applicants have amended the specification and claims as set forth above. More particularly:

The specification has been amended to identify one of the parent applications by its provisional patent application serial number, and to correctly identify the syringe with reference number 14.

Independent claim 21 has been amended to incorporate the limitations of its dependent claim 22. As such, the §102 rejection of claims 21 and 23 is believed to be overcome.

Applicants respectfully believe the above amendments do not present new matter. Favorable reconsideration and allowance of the pending

² Applicants had incorrectly stated in their reply filed September 30, 2009, that the application contains claims 1-23.

³ The Office Action identifies claim 23 as rejected under 35 USC §103 and does not set forth a rejection of claim 22. In viewing the explanation for the §103 rejection, Applicants believe that the intent was to reject claim 22 under 35 USC §103.

claims are respectfully requested in view of the above amendments and the following remarks.

Election Requirement

Applicants' election of independent claim 21 and its claims 22 and 23 was made under the misconception that only claims 1-23 were pending in the application. Claims 24-30 depend from claim 21 and are directed to the same species as claims 21-23, namely, Species D (Figure 4). Therefore, Applicants respectfully request rejoinder of claims 24-30.

Rejection under 35 USC §103

Under the 35 USC §102 rejection, the Examiner cited U.S. Patent No. 4,321,461 to Walter, Jr., et al. (Walter) for disclosing an intravenous infusion apparatus having a "flow rate monitor and totalizer with count display system" with

a sensing element (23) having a first response to the density of the fluid flow (drop count monitor) and a second response to the mass flow rate of the fluid flow (totalizer) further see paragraphs at columns 6-8 discussing drop rate and total volumization, . . .

However, Walter does not disclose anything capable of sensing density or mass flow rate. Simply stated, a “drop count” and a drop count total (“totalizer”) provide information regarding volume, but nothing regarding density or mass flow rate. Therefore, Walter’s system is entirely based on monitoring volume, without any interest or capability of sensing density or mass flow rate. Applicants performed a word search of Walter, and the words “density” and “mass” are never used in Walter.

Though Tadigadapa discloses a Coriolis sensing element capable of sensing mass flow rate and density of a fluid, there is no suggestion in Walter or Tadigadapa for using mass flow rate and density of a fluid to control the volumetric flow rate of a drug being infused into a patient. However, as taught by Applicants (for example, at paragraph [0011]), the monitoring of mass flow rate and density provides advantages beyond that contemplated by Walter. For example, these properties can be advantageously used to prevent medication delivery errors and avoid venous air embolisms by detecting gas bubbles and other phases within a drug being infused, as well as detect if (based on density) the wrong drug is being infused.

In view of the above, Applicants respectfully believe that the combination of Walter and Tadigadapa does not suggest the infusion system

recited in Applicants' independent claim 21 or any of its remaining dependent claims. Applicants therefore respectfully request withdrawal of the rejection under 35 USC §103.

Closing

In view of the above, Applicants respectfully believe that the claims define patentable novelty over all the references, alone or in combination, of record. Applicants therefore respectfully request that their patent application be given favorable reconsideration.

Should the Examiner have any questions with respect to any matter now of record, Applicants' representative may be reached at (219) 462-4999.

Respectfully submitted,



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